



Chulalongkorn University

Teaching and integrating PhD and Post-doctoral programs: Developing transformative social sciences



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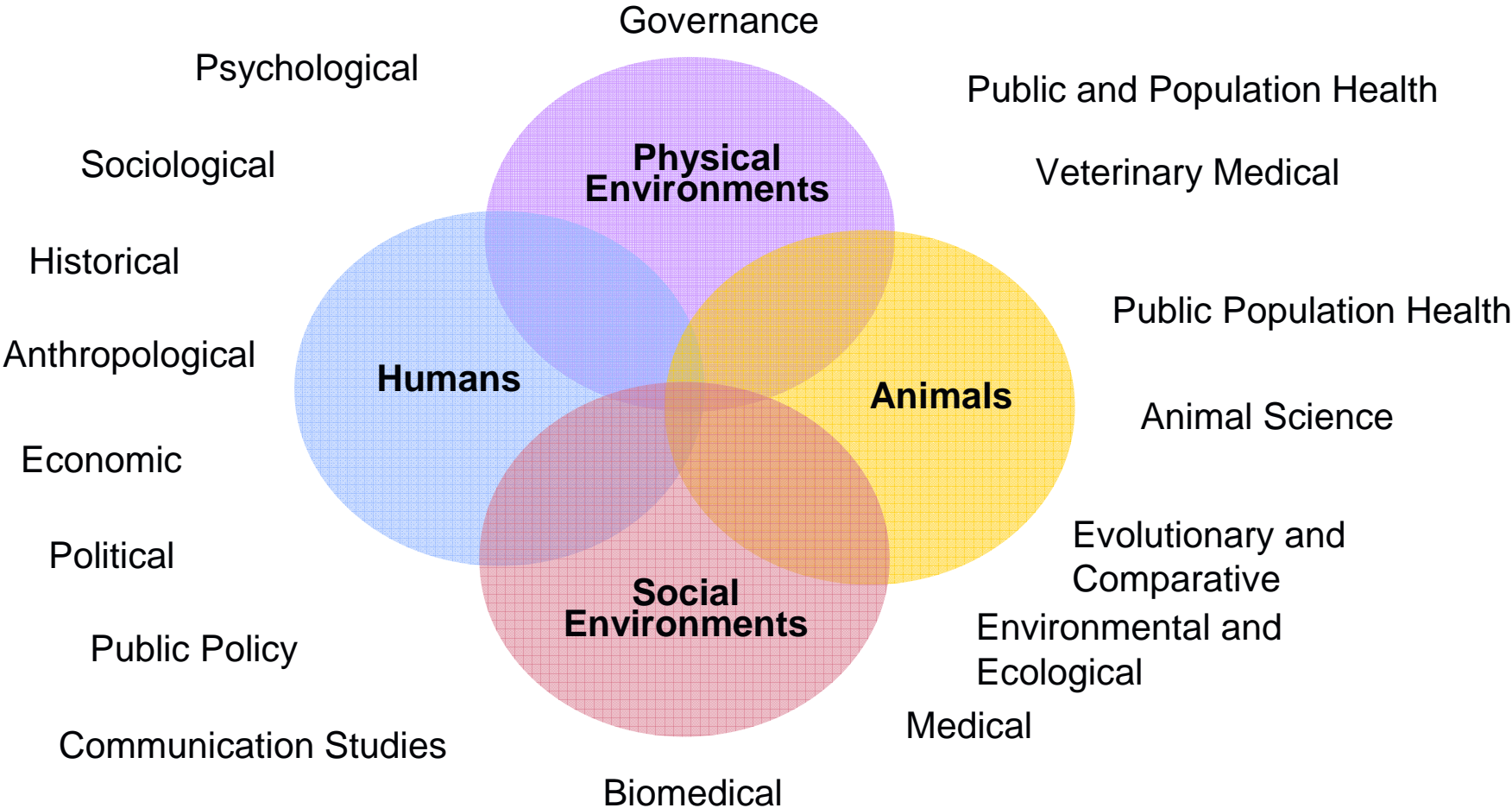
Content

- 1. From disciplinary knowledge to complex analysis and training for transformative science**
- 2. Learning from nature for nature and human beings**
- 3. Integrating risk analyses in science and technology**
- 4. Common research questions, disciplinary methods and interdisciplinary interpretation**
- 5. Systemic integration of knowledge through cluster analysis**
- 6. Conclusions: What are the limits and potentials of social science development in Thailand (SSDT) ?
Research questions, general and specific objectives, goals, means, human and physical resources**



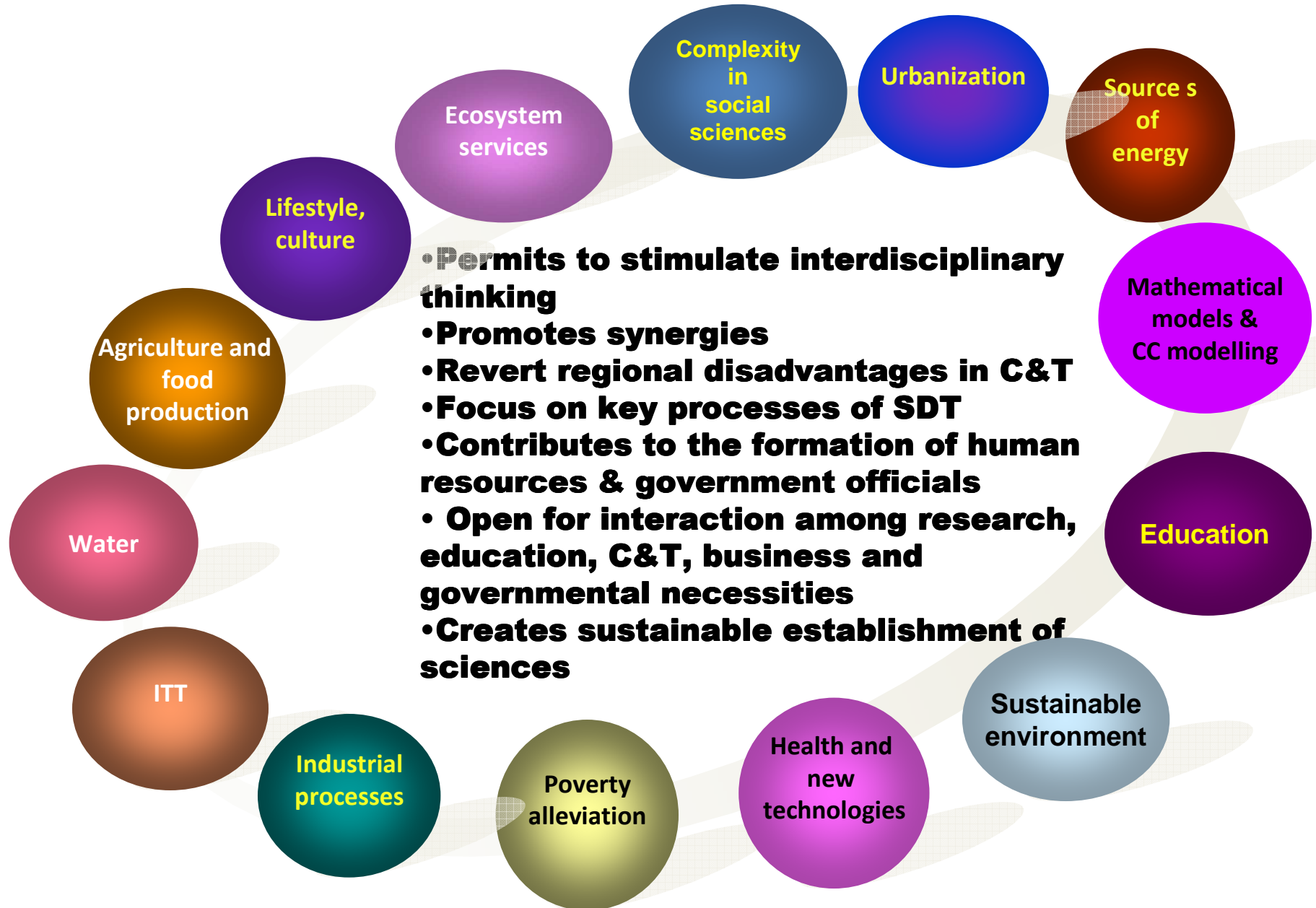
1. From disciplinary knowledge to complex analysis and training for transformative science

Interaction of practical and theoretical knowledge

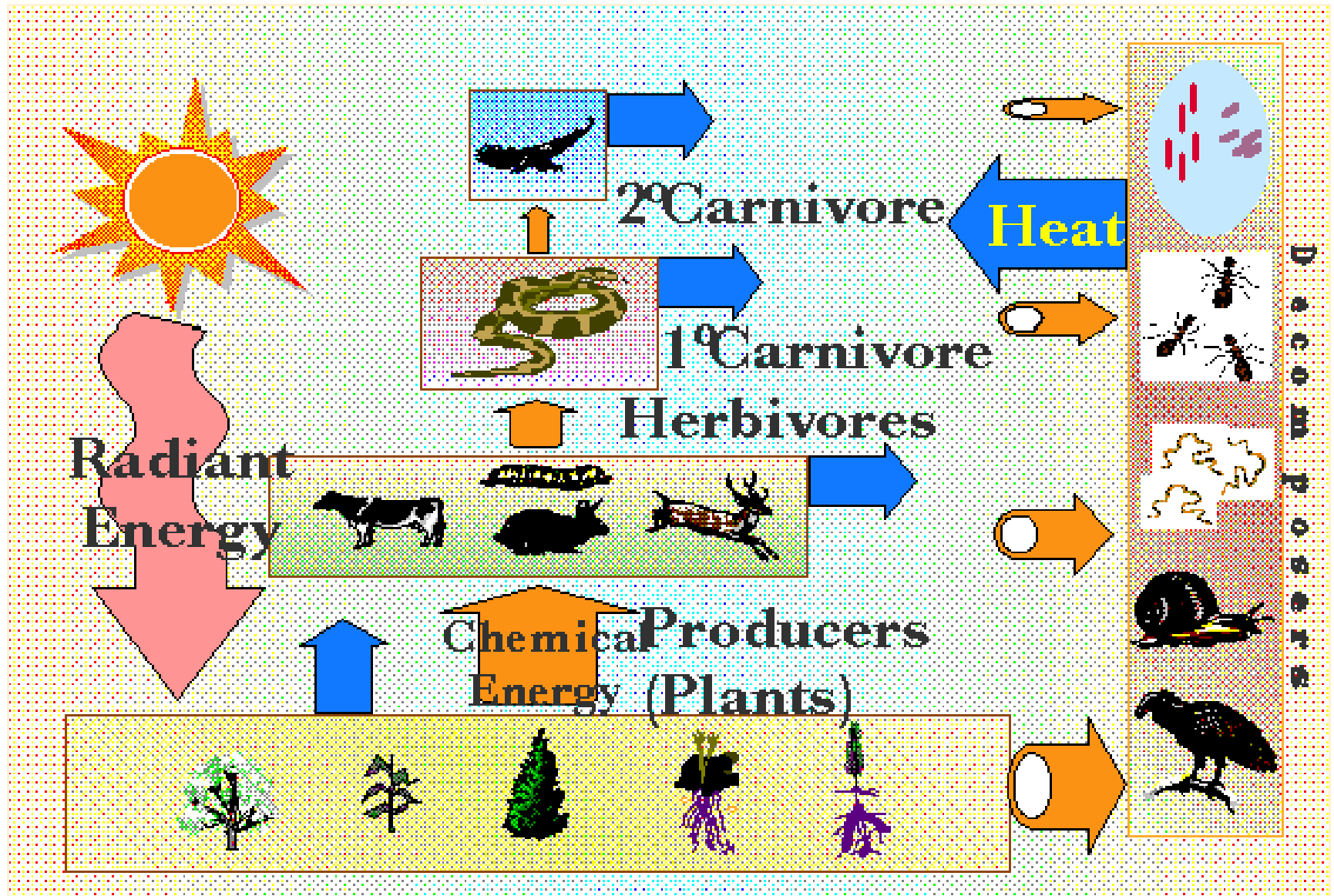


Source: Rock et al., 2009

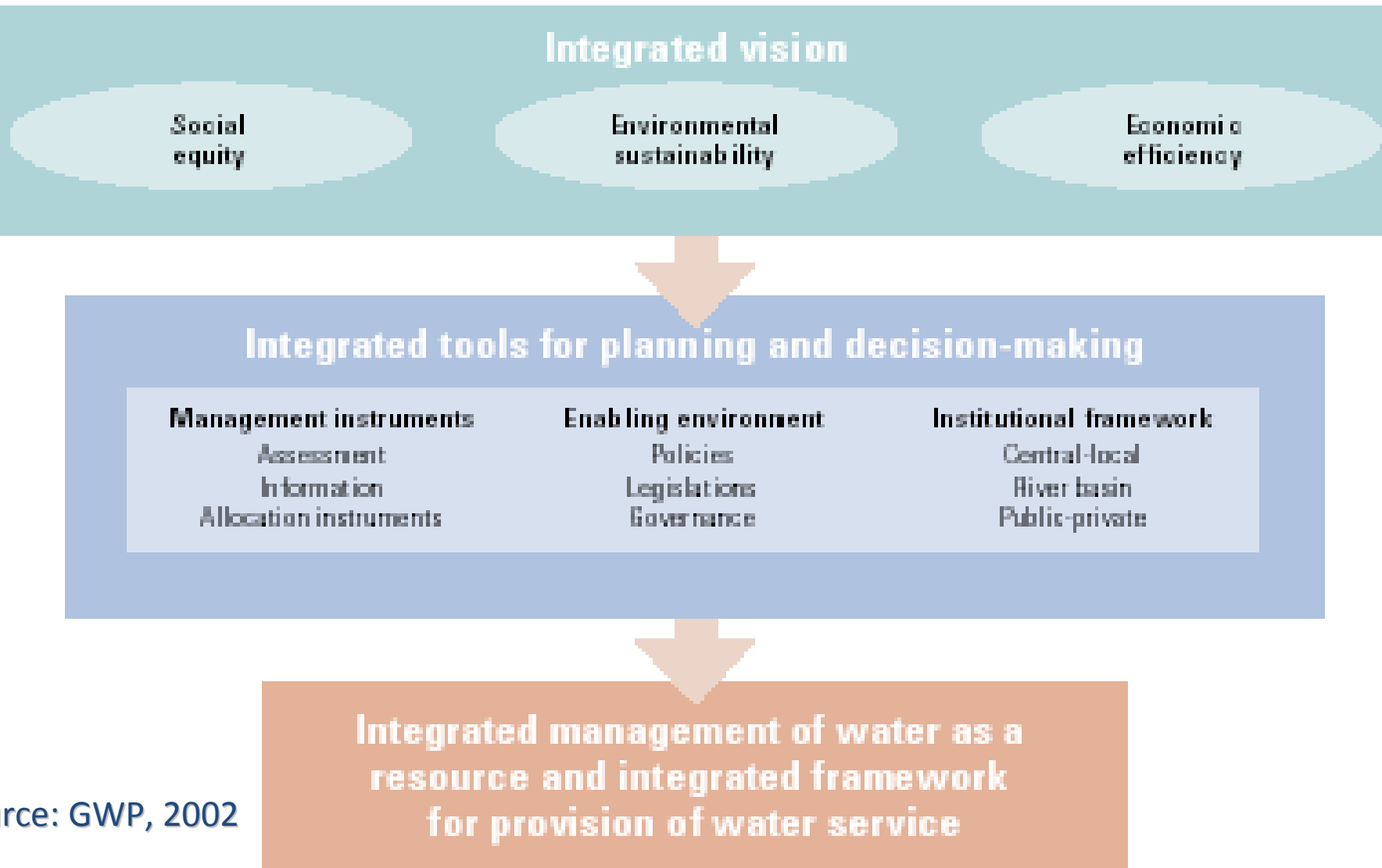
Transversality of transdisciplinary knowledge



2. Learning from nature: energy flow



Integrated vision of knowledge: For nature and human being

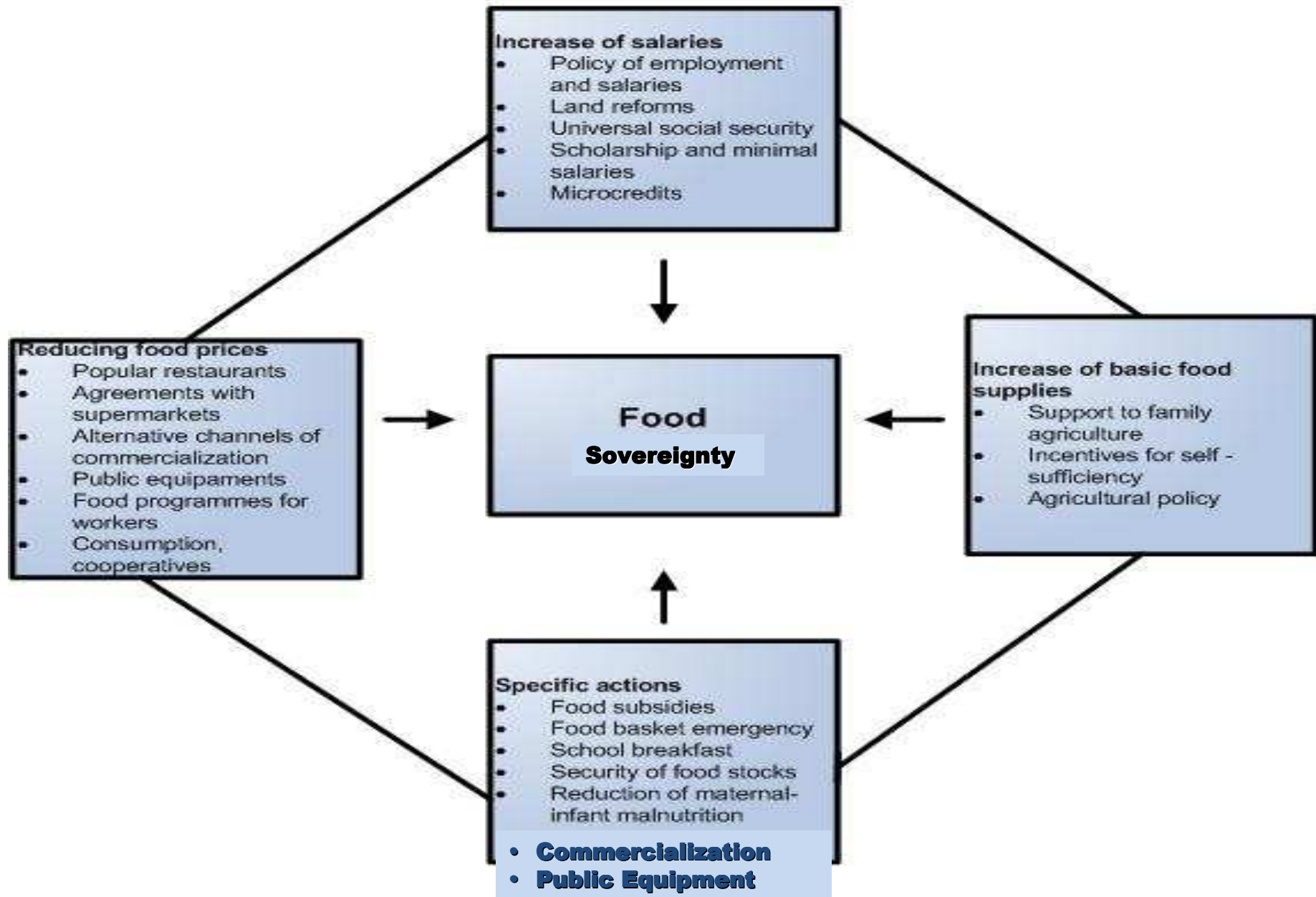


Source: GWP, 2002

Poverty alleviation, food security, social justice and sustainable social development: bases for SSDT



Program "Fome zero" (Without Hunger) in Brasil





3. Integrating risk analyses in science and technology

Global Risks (Beck, 2012)

- 1. De-localization:** causes and consequences are not limited to one space: they are **omnipresent**. Do not respect borders and nation states and have long latency period (e.g. toxic waste, CC): nation-state is not the frame → cosmopolitan post-modern authorities
- 2. Incalculableness:** unpredictable, complex, non-linear, global with local impacts and impersonal
- 3. Uncertainty:** unknown, unpredictable future with cascading effects (Fukushima) or tipping points
- 4. Non-compensatibility:** precautionary principle, preventive & proactive instead of reactive behaviour

Risk and risk management: human management and technology

q	3	4	4.64
behavior	subcritical	subcritical	supercritical (explosion)

Source: Prigogine, 1989:2

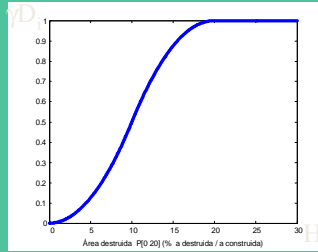
7.5. HAZARDS

$$H_i(I(t), t) \mid i = 1, 2, \dots, m$$

EXPOSED ELEMENTS (COMPLEX DYNAMIC SYSTEM)

VULNERABILITY FACTORS V
 $(\gamma D_i(t), \gamma F_i(t), \gamma R_i(t), t) \quad i=1, 2, \dots, n$

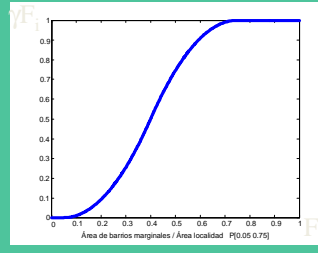
γD_1
 γD_2
 \vdots
 γD_n



Exposure and Physical Susceptibility hazard dependent
Gender coping training

Physical Damage $D_\phi(\gamma D_i)$
 first order impact

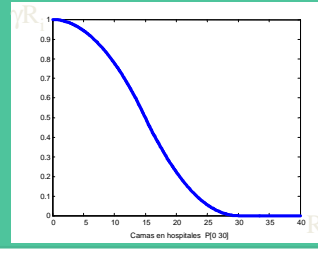
γF_1
 γF_2
 \vdots
 γF_n



Social and Economic Fragilities non hazard dependent
Gender Specific Management

Impact Factor $I_f(\gamma F_i, \gamma R_i)$

γR_1
 γR_2
 \vdots
 γR_n



Lack of Resilience or Ability to Cope and Recovering non hazard dependent
Gender Specific Education

second order impact

RISK
 $R(D_\phi, I_f)$

ACTUATION SYSTEM

CORRECTIVE AND PROSPECTIVE INTERVENTION

- ✓ Risk Identification
- ✓ Risk Reduction
- ✓ Disaster Management
- ✓ Risk Transfer
- ✓ Risk Gender Bias

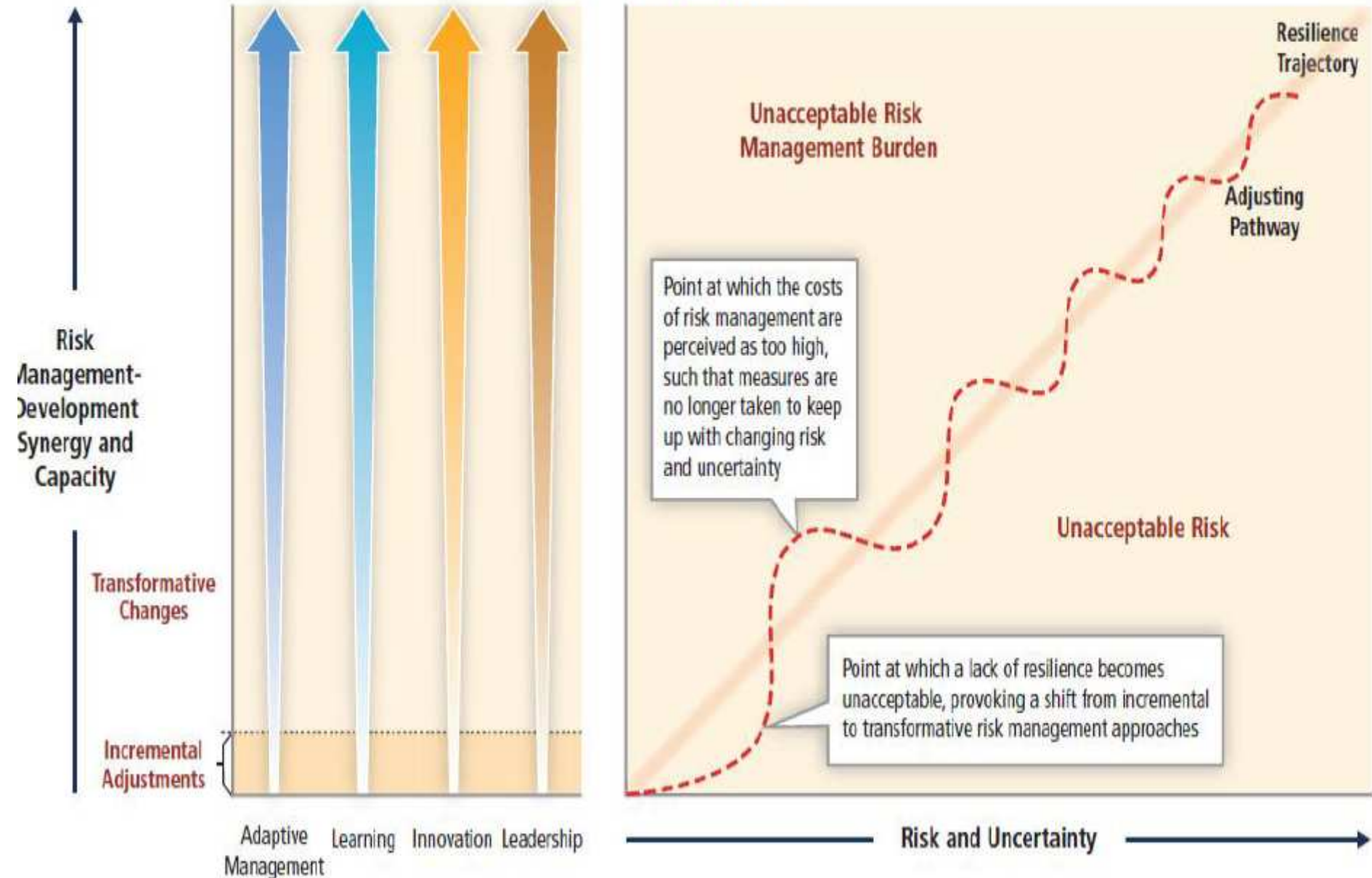
CONTROL SYSTEM

RISK MANAGEMENT SYSTEM

Source: Cardona, 2005

Social sciences incremental & transformative pathways to resilience

Source: IPCC-SREX, 2012



Prevention

1. Reduction of 50% of green-house gases (GHG) by 2050: Post 2012
2. Resource conservation
3. Recycling and reuse
4. Restoration of deteriorated ecosystems (forests, corral reefs, mangroves)
5. River basin management
6. Actions against land erosion and desertification
7. Disaster risk reduction and risk management
8. Early warning systems
9. National preventive disaster systems
10. Gender-related disaster responses and training
11. Reduction of social vulnerability: 53% of disaster dead from countries with low human dev. index



4. Common integrated research questions, disciplinary methods of research and transdisciplinary interpretations and policy proposals

What are the limits and potentials of sustainable social science in Thailand?

General goal: Elaboration of a model of sustainable social development with social justice in short and medium-terms

Publication of project of "State of Art" in Thai and English with methodological and empirical proposals for integrated study of SSdT

SSdT

"State of Art" of the present model of social development in Thailand (SSdT)

Catalogue of existing tools:

- Human resources
- Capacity building
- Institutions and research centres
- Infrastructure in Thailand

Existing disciplinary, multidisciplinary, institutional and multi-institutional research projects for SSdT

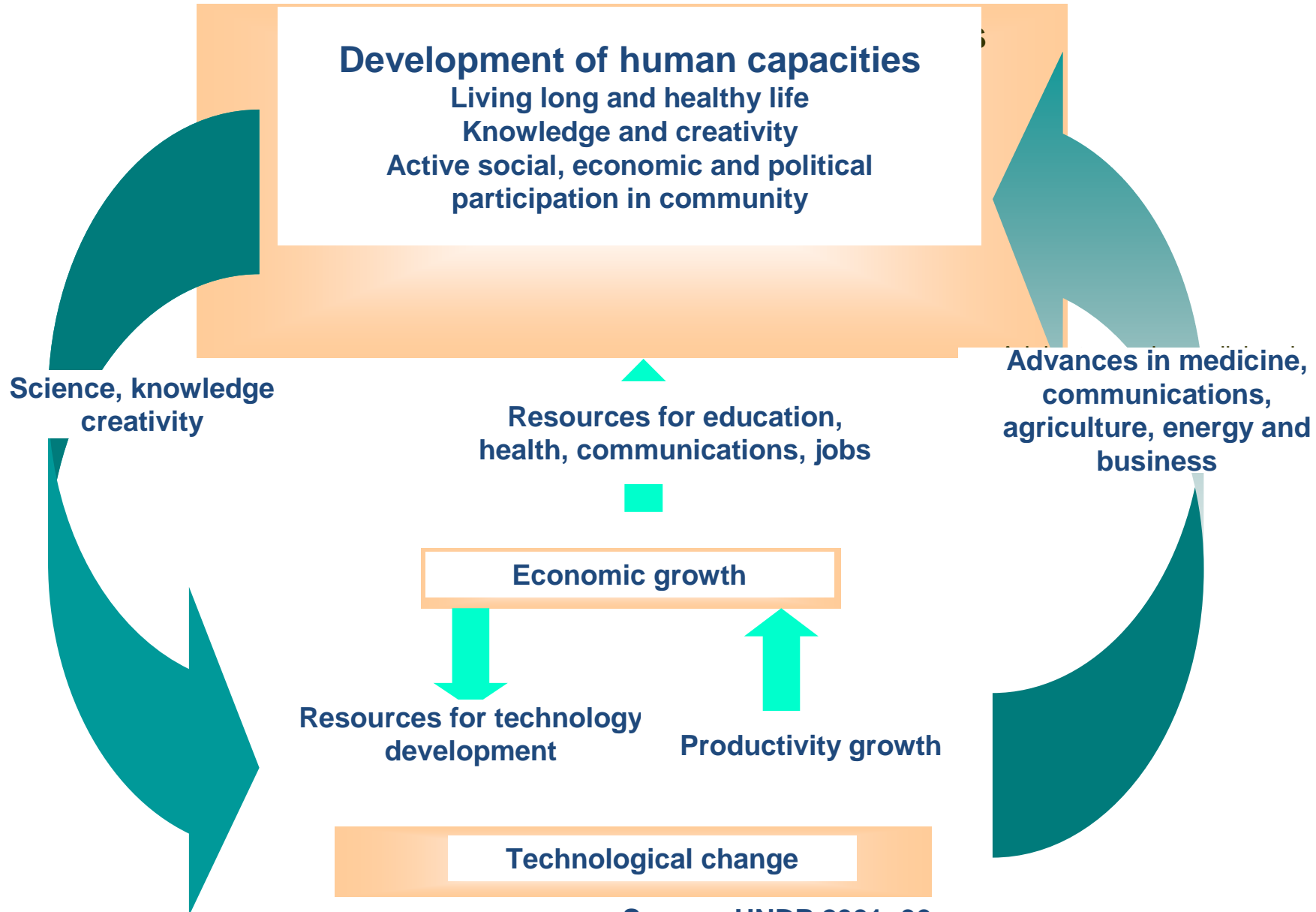
Specific objectives and goals

First year: development of research projects and data banks where the processes e.g. food, water, health, energy, transportation, education, lifestyles & culture could be empirically developed

Financing from national and foreign sources (universities, HTF, Nat. Research Council, collaboration with foreign universities)

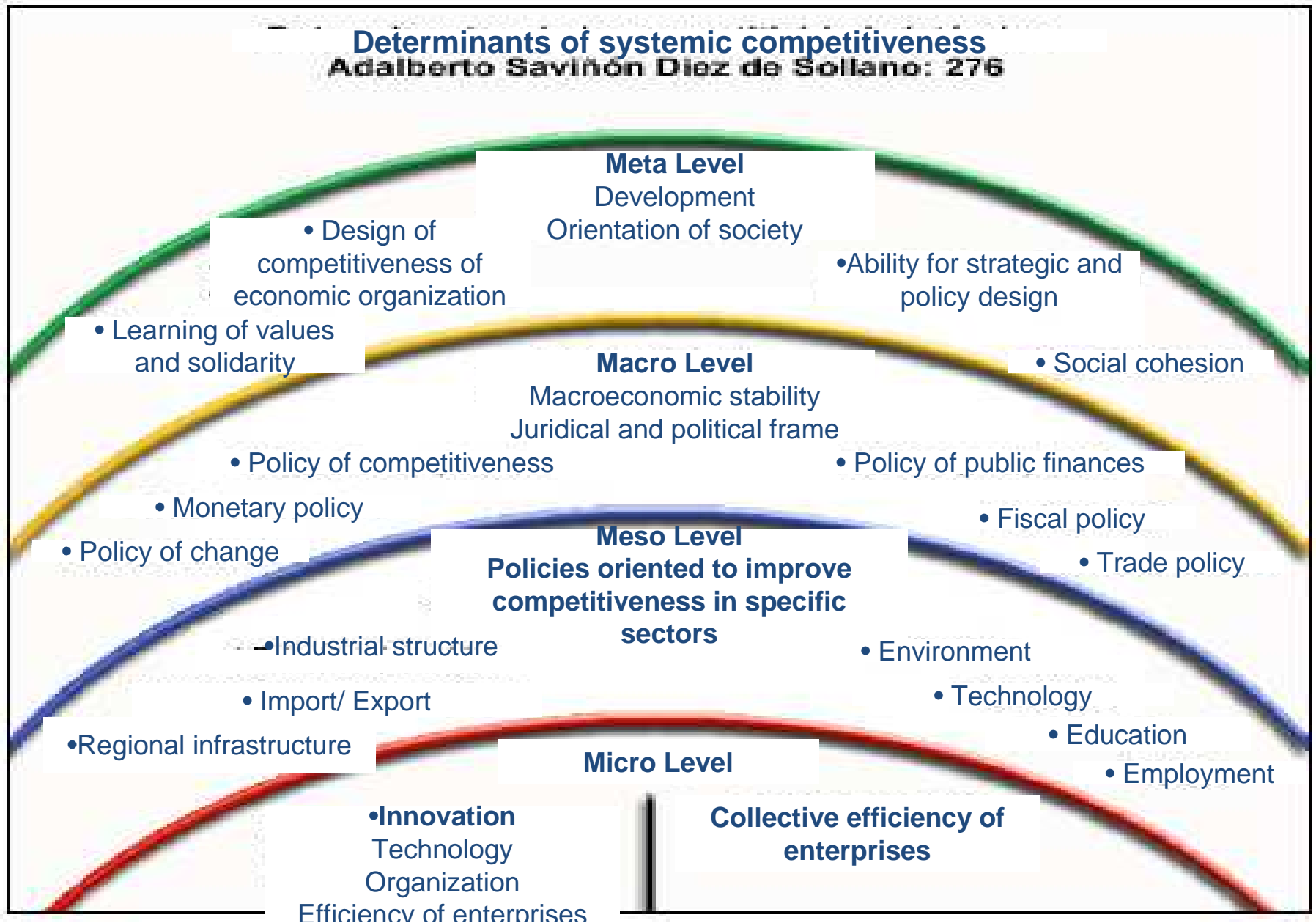
Second and third year: creation of multidisciplinary, multi-institutional systemic projects, oriented to develop a national model of SSdT

Capacity Building



Systemic Competitiveness

Determinants of systemic competitiveness
Adalberto Saviñón Díez de Sollano: 276



Stakeholder' participation

1. Consolidation of democratic living together through institutions: objective value
2. Citizen attitude with knowledge and experiences: subjective value
3. Participation in necessary to consolidate democracy: political value
4. Taking part in the decision making process and the conduction of the society, beyond the electoral process and the vote: ethical value

Civil Society: occidental view

1. Jusnaturalists (Grotius): political society vs natural society
2. Locke, Kant, Rousseau, Hobbes: civilized society versus wild society
3. Marx: political society (State) vs civil society (private sphere)
4. Gramsci: political apparatus of State vs worker class
5. Liberalism: Nation-State vs citizen
6. Habermas: Transnational enterprises vs postnational civil society

Postnational Civil Society

1. Mediator between State and market;
2. Struggling for basic consensus;
3. Integrated by individuals and no corporative behavior, representing interest of groups or parties;
4. Active within the state of law;
5. Consolidate democratic life through citizen participation;
6. Globally articulated through common interests (sustainability, equity, legality, Human Rights, diversity);
7. Behave with values such as tolerance, pluralism, responsibility, solidarity, legality, justice, equity and sustainability
8. With gender equity and recognition of gift economy from women and men

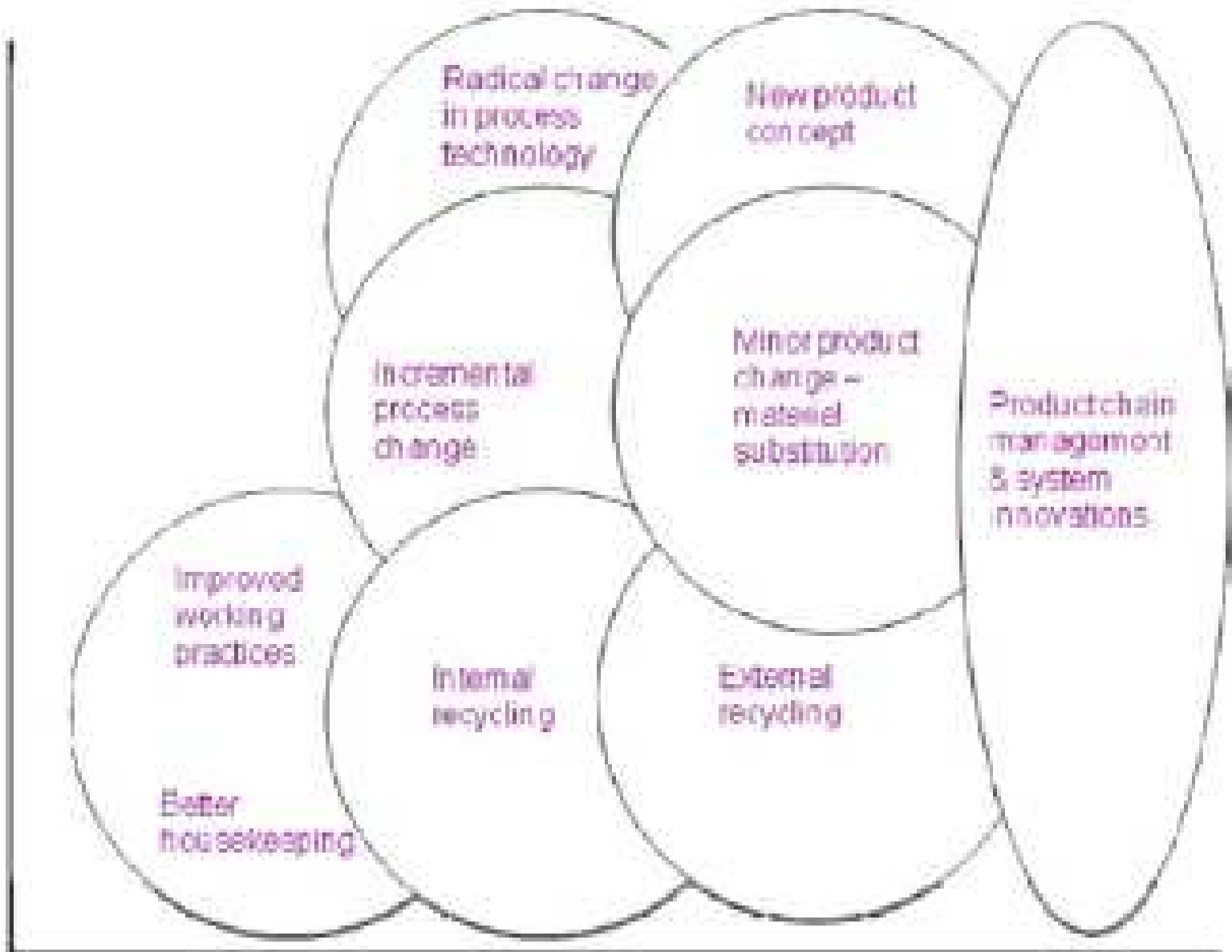


**6. Conclusions:
What are the
limits & potentia-
ls of social
development in
Thailand?
Research
question, general
and specific
objectives, goals,
means, human
and physical
resources**

Requires
new
resources

Types
resource
deployed

Redeploy
existing
resources



Local

Actors in supply chain

Societal

Source: Smith, Voss, Grin, 2010:4



Gender Empowerment mitigates GEC

Complex networks sustain human life in normal times.
Vulnerability increases during disasters and conflicts.

Alternatives:

1. Develop complex networks and training to support social resilience and bottom-up empowerment.
2. Active female and male participation in education and disaster risk reduction reduces risks and create resilience.
3. In resilient societies women educate, care and maintain cultural and historical memory.
4. Survival strategies are basically in the hands of women.
5. Empowerment of women reduces gender violence and insecurity prior, during and after disasters.



Transition process with peace

Arena of transition

**Problem structuring:
objective(s)**

**Actors of
Transition
(stakeholders)**

**Learning,
monitoring,
evaluating,
transforming**

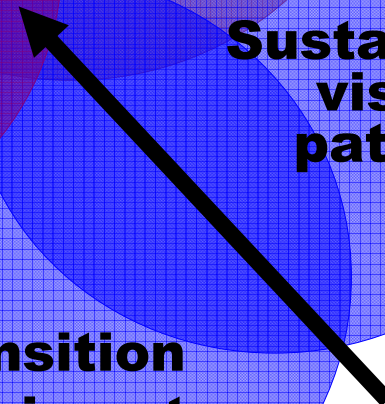
**Agenda of
transition**

**Sustainability
vision &
pathways**

**Activities of
transition**

**Transition
experiments**

**Transformation
to sustainability**



Arenas of vulnerability

-Dangerous, politicized, violent and conflictive environments, abandoned, affected, destroyed, vulnerable and neglected environments with highly social stratification

Actors of vulnerability

-Marginally with shortage, helpless, without rights, abandoned, socially and physically ill, gender discrimination and violence, femicide, youth stigmatized, girls sold for early marriage
-Organized crime, local crime, machismo, governmental repression, mestizo landlords and hoarders, transnational mines,

Livelihood of actors

Empowerment, resilience-
building, adaptation, dignity,
community organization,
training, DRR

Arenas of wellbeing

- Restored sites, trained people, poverty alleviation, job creation, solidarity, governmental support and training for prevention, & times

**HUGE-
security**

Agenda of livelihood

-Policy of sustainability, equity and equality, negotiation of conflicts, community organization, income,
-human rights, social obligations, fight against intrafamilial violence, communitarian police

Activities of wellbeing

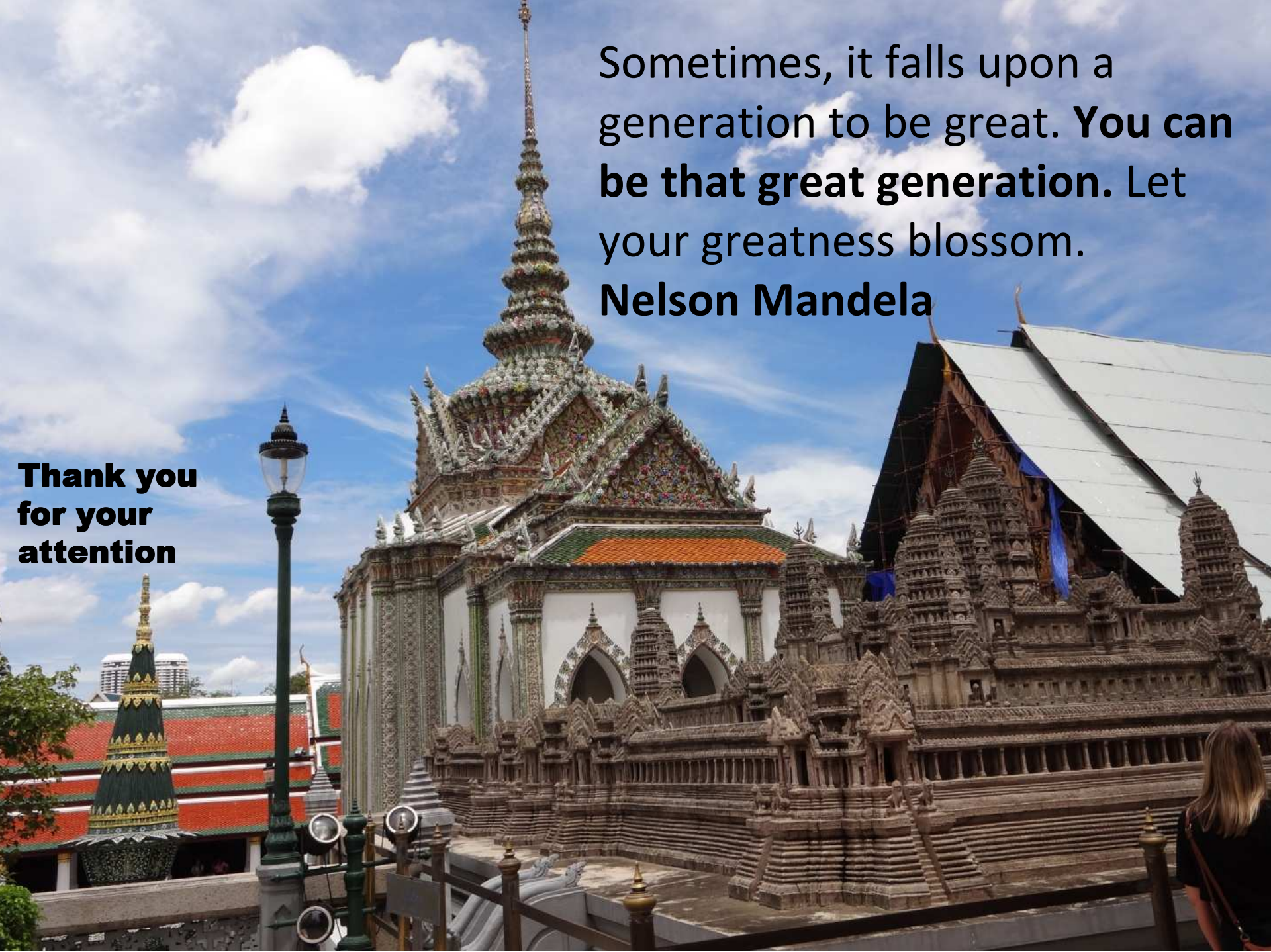
-Strategies of adaptation, resilience building and subsistence crops
- negotiations, agreements, treaties, mitigation, adaptation and prevention

-Conflicts, clashes, environmental destruction, desertification, social discrimination of women and youth, elderly, organized crime, extortion, kidnapping,

Activities increasing double vulnerability

-Lack of education, health, income and employment, governmental support, hunger, extreme poverty, institutional neglect, gender discrimination & violence, mestizo privilege, landlords, organized crime, illegal crops, community conflicts on resources

Agendas of vulnerability



Sometimes, it falls upon a generation to be great. **You can be that great generation.** Let your greatness blossom.
Nelson Mandela

**Thank you
for your
attention**